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ABSTRACT

This document presents a short summary of ten model elementary teacher education programs developed under the sponsorship of the U.S. Office of Education--the original nine models plus the Wisconsin Elementary Teacher Education Program. After a short explanation of the general approach and objectives of the models, they are ccmpared with each other and with current practice in the areas of instructional goals, overall program organization, curriculum design, institutional relationships, innovation, student guidance, management and control, and placement and followup. An appendix lists the directors of the projects and other reports on the models, some available through ERIC Document Reproduction Service. (RT)

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A Short Summary of Ten Model Teacher Education Programs

by

Judith Klatt and Walt Le Baron

System Development Corporation

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November 1969

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

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National Center for Educational Research and Development

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PREFACE

The improvement of teacher education must obviously be an essential part of any effort to improve education as a whole. And increasing recognition is being given to the idea that educational improvements require comparatively large-scale, carefully planned and coordinated efforts, rather than small and fragmentary research projects which have little chance of effecting sustained changes. Accordingly, the U.S. Office of Education is sponsoring a project to encourage total design and implementation of several different but innovative elementary teacher education programs. The present document is a short summary of ten elementary teacher education models supported to date by that project. Leadership in designing these models has been provided by the following institutions:

- Columbia University Teachers College
- Florida State University
- University of Georgia
- University of Massachusetts
- Michigan State University
- Northwest Regional Educational Laboratory
- University of Pittsburgh
- Syracuse University
- University of Toledo
- University of Wisconsin

The present summary has been deliberately made extremely brief. Consequently it neglects or oversimplifies many important features of the ten models. The interested reader should consult the list of publications in Appendix B which contains

information on the documents which originally presented the models, as well as on various related summaries and commentaries.

I. THE MODEL TEACHER EDUCATION PROJECT

Elementary teacher education has generally lagged behind the swift pace of change in American education. As innumerable critics have pointed out, teacher educators tend to be a conservative group, satisfied with the status quo and present educational patterns. But elementary school programs continue to be expanded, and the traditional teacher role can no longer provide the depth and imagination that are needed. The entire field of education has been subjected to conflicting pressures from developments in cybernetics, curricular reform, technologies, behavioral psychologies, and systems theories. As education is pulled and pushed first one way, then another, its emphases are frequently distorted and sometimes its aims and goals are lost sight of. These tensions, operating in a traditionally conservative environment, cause conflict and confusion as perhaps the necessary concomitants of growth and change.

While great progress has been recorded in improvements to parts of the process of teacher education, limited attention has been devoted to organizing these parts into meaningful, integrated, goal-directed programs. In an attempt to move toward effective and forward-looking total programs, the Model Teacher Education Project was conceived. In August of 1967, a group of consultants to the U.S. Office of Education began to explore the feasibility of using large-scale project development techniques for planning elementary education. These processes would integrate the improvement of both elementary instruction and teacher preparation. This planning resulted on October 16, 1967 in the issuing of a request for

proposals to develop specifications for model elementary teacher education programs. By the target date of January 1, 1968, eighty proposals had been received.

The following statement prepared after the August 1967 planning meeting summarizes the intent of the project:

> Any proposals developed for the program should include a rationale, a viable theory, specified objectives, and evaluational components. In addition, concern should be directed to individualized instruction, simulation, self study, the use of multi-sensory media, multiple approaches to the problem of educating elementary teachers, aspects of team teaching, realistic reality-testing laboratory experiences, built-in development, demonstration and dissemination phases, built-in systems and cost analyses, in-service education for all personnel conducting such programs, and the results should be transportable as models to other elementary teacher producing institutions. Since teachers have multiple competencies and multiple as well as sequential effects, proposals for such a program should be geared to how children learn and should also relate to how teachers aid the development of learning strategies and skills in children. Designs should be stimulated which demonstrate linkages with teacher education pre-service producers in addition to the input expected from education-related industrial and systems analysis corporations.

The project was planned in three phases. (See Figure 1.) Phase I provided the funding to develop designs and specifications for nine model programs. Phase II of the project is now in progress. During this phase, limited to institutions which graduate at least 100 elementary candidates a year, each institution will determine the feasibility of developing, implementing, and operating a model teacher training program based on the specifications produced in Phase I. The ten models reported on in this volume are the nine supported by Phase I funding, plus the Wisconsin Elementary Teacher Education Program which was developed independently, but which is receiving Phase II support. Phase III will involve the operation of several models as on-going programs of elementary teacher preparation. Present plans call for implementing these to test their ability to achieve the goals of program involvement.

The Phase I models represent basic conceptualizations for a future-looking, change-oriented teacher education program. The Phase II feasibility effort will produce information on necessary resources and costs, management and administrative structures, needed research and development, and the implications of adopting such a program. Phase II project work began in May 1969 and will be completed by December 31, 1969. A date has not yet been set for the initiation of Phase III.

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TEACHER EDUCATION PROJECT

OVERVIEW

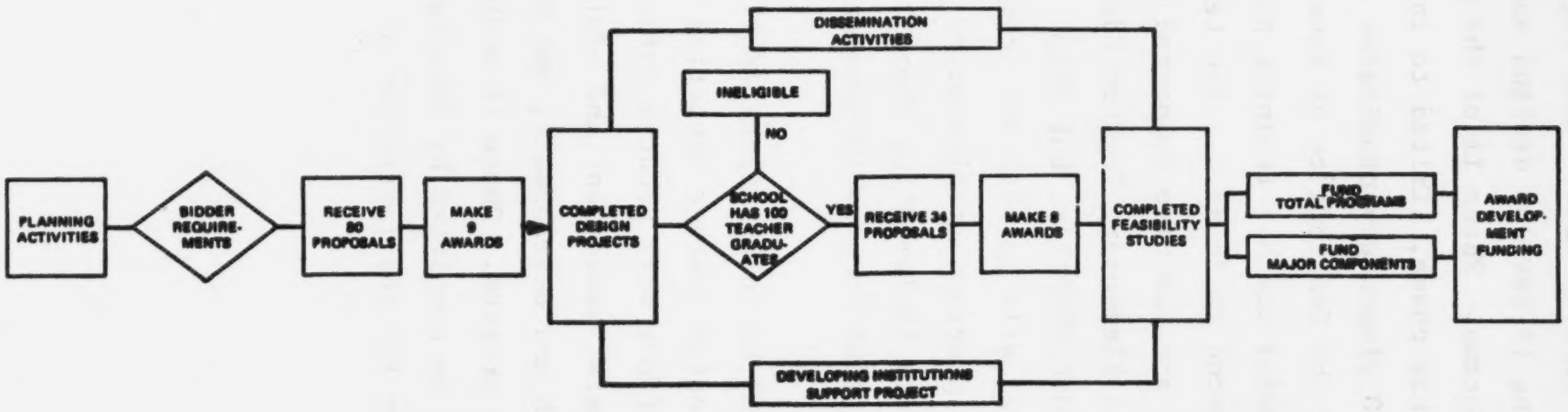

Figure 1. Overview of the Total Teacher Education Project

II. FEATURES OF THE TEN MODELS

A. A Generalized Outline

Each of the ten models was organized to facilitate the purposes of its creators, and as might be expected with any creative project, great diversity in both organization and content has resulted. Some models present principles as guides to action; others outline specific program elements. The treatment of program components varies according to the viewpoint taken by each model. One model, for example, may present a thorough discussion of a management plan, but another may assume that management requires little emphasis at this time.

This diversity in presentation works a hardship on the general reader who may desire only a quick overview of the project. Accordingly, a standard format for viewing the models has been adopted for this report. It includes the following basic topics:

- Major Themes
- Instructional Goals
- Overall Program Organization
- Curriculum Design
- Institutional Relationships
- Innovative Features
- Student Guidance
- Management and Control
- Placement and Follow-Up
- Special Features

While each model includes these major elements, or most of them, their treatement varies widely. The present short summary contains highlights from the ten models in Section III, following the foregoing outline. The reader desiring additional information may wish to read more detailed summaries or acquire the complete reports, as listed in Appendix B.

In the present summary, a strong effort has been made to eliminate unnecessary jargon. It has also been desirable to standardize the use of a few key but potentially confusing terms. In all instances, the pupil is the child who attends elementary school; the student is the college person preparing to teach; and the teacher is the certified individual working in the school. An intern would be a student working as a teacher but not yet having completed the model's training program. Clinical professors are found in some models; they are members of the school of education, but they may be working full time with interns at an elementary school.

With respect to the topics previously listed, the models tend to develop somewhat differing points of view, emphases, and situational adaptations. On two critical matters, however, there is very little difference among the models. These two general agreements relate to the importance of systems analysis and of behavioral objectives.

B. Systems Analysis and Models

The U.S. Office of Education request for proposals called for the use of a systems analysis approach in the design of specifications for the models. Systems analysis should be understood in this context as a general term meaning an orderly approach

for first defining a universe of interest, and second determining what changes in that universe will cause a desired effect. Systems analysis generally begins with the broadest statement of the universe and then subdivides it into components based on an analysis of functions and the interrelationships among functions. Each aspect of the system must relate to the achievement of the goals established for the system. In this respect, systems analysis is a process for relating a program or its parts to the goals envisioned for that program, for using information derived from operation to adjust the program towards its goal orientation, and for designing and selecting alternative approaches based on the particular characteristics of the operating environment.

Systems procedures emphasize processes rather than structures. Since teacher preparation and continuing education is a process relating directly to the college of education and the local school district (and a number of other institutions and agencies), effective channels for communication and interaction among these groups become necessary. Questions of assigning responsibilities to the various agencies, or of sharing resources and information, are re-examined as they affect the process of teacher education. One implication of this design requirement will be a lessening of the distance between the college and the school. An integral framework of responsibility will evolve, and all will contribute to the shared goal of producing quality elementary school teachers.

C. The Use of Behavioral Objectives

The models rely heavily on the specification of behavioral objectives as a basis for the selection of appropriate knowledge and experiences. Each model includes a description of the teacher's anticipated roles and functions in the changing school. This analysis of the teaching task into more or less specific groups of behaviors forms a basis for selecting academic and pedagogical content, as well as methods of practicing its application. Using behavioral methods in effect forces the question of relevance by demanding that direct relationships be shown between the teacher education program and the teacher's eventual classroom performance.

A behavioral objective states the specific actions, or uses of knowledge, expected of the student as a result of a training experience. A list of significant behaviors is first derived from an analysis of the teaching process. The more specific this description, resulting from increasingly intensive analyses, the more specific the statement of behavioral objectives. When the behavioral objective has been stated, criterion measures are explicated to specify the kinds of tasks and information which the student will possess as evidence of mastering the objective. When a behavior can be easily analyzed, a behavioral objective and the relevant criterion measures are readily specified. The ten models indicate that most single teaching behaviors can be described in this manner.

As behaviors become complex, the statement of behavioral objectives and criterion measures becomes difficult. The analyses presented in the ten models clearly indicate the difficulties encountered in trying to understand teaching processes. Some broad areas of teacher behavior can be

analyzed, objectified, and described, so that criterion levels of acceptable performance can be stated. On the other hand, the models show that very little research evidence substantiates direct relationships between teacher training activities and role performance. Teaching remains an exceedingly complex activity, and a clear explication of some of the parts should not be taken to imply an understanding of the whole. Nevertheless, the models reflect the present state-of-the-art--in itself a valuable service--while they suggest important frameworks for further research and development.

III. CONTRASTS BETWEEN THE MODELS AND PRESENT TEACHER EDUCATION PROGRAMS

The significance of the ten models may be appreciated by contrasting them with present practices in teacher education. In so doing, two facts become clear. First, the models present deliberate attempts to systematically plan entire programs. Second, the models incorporate many innovations, some of which may already be found in existing programs. The following pages indicate how various features of the ten models compare with present elementary teacher education programs. Each reader, of course, will be familiar with exceptions to the implied general description of current practices. Nevertheless, the models do present, on the whole, a distinct contrast.

A. Major Themes

Each of the ten models seeks to relate its view of the teacher, the school, the student, and the program to predictable trends and changes in both American society and education. All emphasize the continuing qualities of democracy, but a few stress the vast changes in life being wrought by advancing technology. The school performs the dual purpose of maintaining society's values while preparing for life in a world of change.

The concept of the elementary teacher as a "generalist" overseeing the "self-contained" classroom is challenged by all ten models. Each sees the teacher emerging as a manager of the learning process. The Michigan State model makes provision for supporting the teacher with aides and media specialists, the latter capable of selecting and producing appropriate learning experiences. The Northwest Laboratory model envisions an instructional manager supported by an instructional engineer

and an instructional analyst, the three working as a team. The team concept emerges in various ways throughout the models. The Toledo model plans a multi-unit school with a team of five or more in charge of a group of pupils variously organized for maximum beneficial instruction.

The radical changes in the structure of elementary education require that the traditional format--six grades times two, staffed by a principal and twelve teachers, sometimes served by a library and a gymnasium, a familiar neighborhood landmark--be discarded. Some exciting changes including large group instructional areas, resource centers, computer terminals, individual study cubicles, teacher-pupil workrooms, and teaching material production centers--a new center of pupil, parent, teacher, community interaction--should be accepted as the format of the future.

What happens to pupils in the school, however, is more exciting than these changes in teacher roles and building plans. New insights in psychology and curriculum organization, along with related technological breakthroughs, are making possible the individualizing of instruction for all students. Instructional management systems make possible the control and adjustment of schedules so that teachers are available to work with pupils at the creative level.

These emerging directions in elementary education are reflected by the models. Florida State emphasizes academic preparation because the competent teacher must be a specialist in at least one teaching field. Syracuse, Toledo, and Michigan State have developed program components to train teachers in the selection, control, and preparation of technology-based learning methods.

Pittsburgh, Columbia Teachers College, and Massachusetts have attempted to individualize teacher preparation through alternate program organization. The teacher developed by these models, while able to function in the present elementary school, will be prepared for a leadership role in the school of tomorrow.

B. Instructional Goals

Twelve hundred colleges and universities prepare teachers for America's elementary schools, and 800 institutions account for over 90% of the graduates. Despite this huge number of institutions, one finds little diversity in program structure or goals. An undergraduate student pursues a four year program, receives approximately 124 semester credits or the equivalent, and, if an appropriate number of educational courses--including student teaching--have been completed, a provisional teaching certificate is awarded upon graduation. (A graduate without the necessary education courses can be certified by completing them as part of an M.A. program or through special certification programs.)

The ten models, by contrast, envision elementary teacher education as a process of continuous training throughout the teacher's career. The Georgia model outlines alternative entry levels as part of a developing educational "career ladder," and Massachusetts proposes seven levels in a hierarchy of responsibility and training within a teaching staff.

The models' continuing in-service education programs are usually to be planned in close conjunction with local school districts. Wisconsin, for example, has planned a Telecommunication System which will involve cooperating schools in constant communication with the university. Such a system will provide instructional resources for both interns and in-service teachers.

An explicit clarification of goals is featured by the Northwest Laboratory model, which separates the education leading to a degree and the professional preparation resulting in certification. While the processes may be coterminous, their purposes and goals are differently defined.

Somewhat varying instructional goals are reflected in differing subject matter emphases from model to model. Massachusetts and Columbia Teachers College, for example, emphasize human-relations skills, Toledo emphasizes instructional procedures and technology, and Michigan State emphasizes the behavioral sciences.

C. Overall Program Organization

Two curricular patterns have dominated elementary teacher preparation programs. The first includes an academic major-minor, general education as prescribed by the college, and special courses in educational foundations and teaching skills. The second type of program seeks to integrate academic content and pedagogy in a single series of courses covering elementary school subjects. Both patterns, however, include a period of student teaching preceded by other experiences in working with children. The academic major-minor and elective courses may be taken outside the department of education, and frequently beyond its influence, so that the student finds it necessary to comply with requirements established by two or more college authorities.

Some of the ten models have changed this general pattern in radical ways, but others have found it generally acceptable. Florida State, Georgia, and Wisconsin maintain the academic

major-minor components essentially outside the school of education. The Northwest Laboratory model addresses itself only to the professional component, feeling that the rest of an undergraduate program is the responsibility of the college. All the models have questioned carefully the relationship between the program of study and the teacher's classroom performance, and each has structured a series of experiences, simulated and actual, which precede the student's entry into teaching and continue to support his first efforts through in-service training.

The problems of time and course organization proved troublesome. If a model program is to be responsive to its educational goals in an effective and efficient manner, it should be free of the constraints imposed by a four year program in which success is measured by the completion of a fixed number of course units. Each model reacted differently. Michigan State has redesigned the whole educational program. Massachusetts has a curriculum based on performance criteria. Syracuse establishes minimum levels of achievement to be reached at the end of four years, but permits students to start at and progress to points which are individually determined. Georgia, sensing resistance from some sectors of the university, is undertaking planning studies to determine the consequences of removing time and credit requirements. This same concern has led other models to plan a twelve month school year, while Florida State has planned to have its graduates return to the campus for each of the three summers following graduation.

The difficulties inherent in models based on achievement levels and proficiency, rather than completion of classes through eight semesters, imply grave consequences for the character of American

higher education. Although each model deals with these issues, no one of them has found it possible to move entirely beyond the institution. The models do, however, present the kind of thorough systematic planning needed before such changes can be implemented.

D. Curriculum Design

Traditionally, the basic curriculum unit for teacher education programs has been the course. Generally, a two to four hour a week, semester-long segment is organized around some ascending order of difficulty within a complete program, but the organization of material during the course is determined by the professor or the textbook. Courses seldom include pretesting as an entrance requirement or the individual sequencing of experiences. Rarely are there direct ties between academic study and the ongoing world of the teacher.

Although some of the ten models retain a basic course organization with improvements, most of them rely on the instructional module as the unit of curriculum. The module is organized around a single objective. A pretest determines the student's readiness to attempt the module, and remedial experiences are sometimes provided during it, or as a result of failure. The student paces himself, working as rapidly as his ability permits him to handle the material. Figure 2 illustrates the use of an instructional module as designed by the University of Georgia (referred to in the figure as a proficiency module).

Each module specifies an instructional objective and criterion measurements. Prerequisite experiences, based on an assumed sequencing, are stated, but in most cases the student is permitted to skip modules by passing a pretest. Knowledge and

S = Student
PM = Proficiency Module

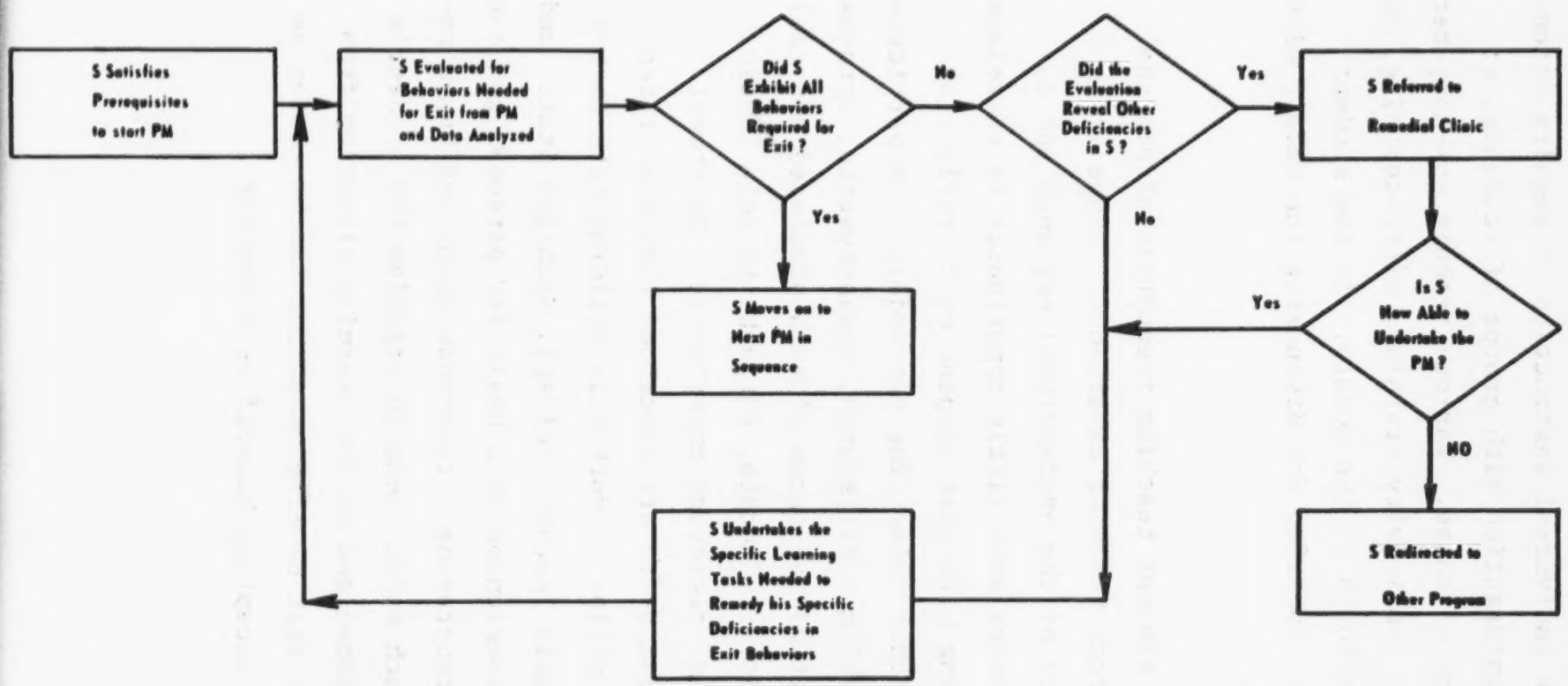
S Satisfies Prerequisites to start PM
S Evaluated for Behaviors Needed for Exit from PM and Data Analyzed
Did S Exhibit All Behaviors Required for Exit ?
No
Did the Evaluation Reveal Other Deficiencies in S ?
Yes
S Referred to Remedial Clinic
Yes
S Moves on to Next PM in Sequence
No
Is S Now Able to Undertake the PM ?
Yes
NO
S Undertakes the Specific Learning Tasks Needed to Remedy his Specific Deficiencies in Exit Behaviors
S Redirected to Other Program

Figure 2. Flow Chart of Procedures for an Instructional Module (Proficiency Module)

experiences for study and practice are carefully described. The module may permit individual instruction or require attendance at a lecture, interaction with groups of students, or sometimes combinations of these. Various techniques--computer-assisted instruction, sensitivity training, micro-teaching, or simulation--may be employed in the module. If the student wishes, provisions are included for discussing the module with a clinical professor.

In present programs, student teaching frequently offers the student his first formal teaching experience. Since it is scheduled near the end of the professional sequence and the college program, students have little opportunity to correlate their academic learning with what happens or to reflect on themselves in the teacher role. The ten models were particularly sensitive to this problem. Pittsburgh, Massachusetts, Syracuse, and Toledo have specified sequences of both simulated and real experiences for students. Georgia, through its role levels, provides a hierarchy of classroom experiences. Northwest Laboratory and Michigan State are concerned that the student have adequate opportunities to work with children both in and out of school. Columbia Teachers College, Michigan State, and Syracuse use these experiences as a basis for personal guidance and self-growth by structuring a reference group and human relations training. Each model seeks to organize the student's experiences with children and in the learning situation from simple to complex, so that developing skills can be tested as the student grows in accepting himself as a teacher.

E. Institutional Relationships

The school (or department) of education has too frequently remained distant from the remainder of the university. Long-standing and occasionally important conflicts have engendered a separateness which neither group has found unsatisfactory enough to bridge. Similarly, there is often neither an implied nor an explicit operational relationship between the college of education--the producer of teachers--and the local school district--the user of teachers. A resulting lack of communication has caused a disparity between the needs of the latter and the work of the former. Although innumerable efforts have been made to close these gaps, the lack of shared purpose and responsibility has impeded their effectiveness.

A radical change in this situation is envisaged in the ten models. Syracuse, through the vehicle of a "protocooperative" group, has explicitly involved several local districts and other outside groups in the model's planning and operation. Florida State has instituted the concept of the "portal school," an innovative school in each cooperating district whose faculty participates in the design and operation of training experiences. The Northwest Laboratory and Toledo models were planned by a consortium of groups including colleges, school districts, state departments of education, industry representatives, and professional and community groups. The Michigan State Clinic School Network seeks a broad base of community interaction as well as linkages with universities, professional associations, and the state department of education. In all the models, a deliberate attempt has been made to improve communications among the groups responsible for preparing and using teachers and to develop patterns of mutual cooperation and benefit.

F. Innovative Features

Innovation and change have marked every area of elementary teacher preparation, and the observer would be hard pressed to discover a program anywhere which has not been somewhat affected by new developments. Indeed, as the reader who is familiar with teacher education first encounters the models and finds many familiar techniques, there may be strong temptation to pass them off as new statements of old ideas. This conclusion would be unfortunate.

The models make extensive use of new techniques and methods, some of which are presently leaving the research spectrum and becoming generally useful. Along with these innovations, the models present a framework of their use in deliberately planned, on-going programs of teacher preparation. In this sense, they represent an attempt at developing a balanced program through planning for change. It is this combination of planning methods and innovative ideas which makes the models particularly important.

G. Student Guidance

The field of college-level student guidance has been rapidly expanding to meet the changing needs of an increasingly diverse range of students. It is no longer widely accepted that the student will enter college with a sense of vocational goal and life ambition, and colleges now supply testing programs, counseling centers and sometimes career guidance programs. Students in teacher preparation programs benefit from these services.

Typically, the ten models carry student guidance functions even farther than is usual today, although they vary in their descriptions of final services, their analyses of an acceptable student for the program, and their concerns for the student's total plan of life. Florida State and Georgia specify rather high standards of intelligence, health, and interest for admittance. By providing early experiences with children, and then analyzing these experiences through seminar meetings, Michigan State provides a regular career decision and role adjustment format. The Northwest Laboratory model outlines student decision roles in selecting content, experience, and sequencing activities. In general the models seek to make the guidance function an integral part of all program activity so that the student, as he experiences himself relating to the teaching task, is supported by the group and the faculty.

H. Management and Control

Management and control activities may be viewed as responding to two conditions: the control of increasing kinds and amounts of information and an increasing number of decision points for evaluating student progress, modifying the program, and interrelating with additional sources of information. The models have met these challenges in different ways. Florida State will use a Computerized Management System for handling all student and program information. Michigan State is developing the capability to store its learning modules in the computer and to locate them by means of a natural language retrieval system. Wisconsin makes use of a planning, programming, and budgeting system as the analytic framework for review of the model program itself.

I. Placement and Follow-up

Typically, a college placement office finds the first employment for the graduate teacher, and sometimes this office maintains a record for replacement. The teacher, usually because of state certification requirements, returns to a campus to finish either a master's degree or thirty hours of graduate study. Some colleges communicate with graduates for purposes of assessing the value of their preparation, but the practice is not general. Only rarely are there contacts between the student and the advisor after the student-teaching experience. The college of education, as a rule, feels its responsibility ends when the teacher has completed a degree.

In contrast, each of the ten models provides an integrated program of pre-service and in-service education. The in-service program would support the beginning teacher through his first years of professional experience. In this manner continuity would be established through career preparation and early development. Placement is accomplished in the Florida State model through the technique of the "portal school." Students will receive their initial experiences in these schools and stay for their first years of teaching. Consortia are being developed by Syracuse, Columbia Teachers College, Michigan State, and Wisconsin; and cooperating school districts will support the young teacher by participating in a regular program with the university. The clinical professor, a role developed by several models, places university personnel in the cooperating school to work with students and regular faculty. In each model a close relationship between the pre-service and the in-service experiences has been developed, and feedback from practice will determine needed changes in the pre-service elements.

J. Special Features

The models frequently suggest areas of concern which are not generally included within a program of teacher preparation. Most important among these is the need for retraining and upgrading of staff. New techniques of planning and providing learning experiences will require the development of new faculty skills by the college of education. Pittsburgh estimates that each staff member will require twenty hours of retraining. Syracuse and Florida State outline procedures for training the clinical staffs. A related change will be the need for broad communication among the total university faculty. Georgia is planning new linkages as a result of the model. Wisconsin has traditionally viewed teacher preparation as a total university function. Indeed, all of the models have sought to unite the various elements of the university for effective planning of teacher education.

IV. CONCLUSION

This brief summary seeks to emphasize the positive contributions of the models to the redesign of elementary teacher preparation, and, indeed, there are many. They represent the contributions of teams of scholars working on difficult problems, developing complete models of new programs. They incorporate new techniques of systematic planning and the use of behavioral objectives. Each model presents a storehouse of ideas which any institution would find valuable in the rethinking of its own program.

The ten models represent a "first cut" at the redesign of teacher education. Even a few years ago such an effort would have been impossible, since the development of total program designs requires new skills, as well as new knowledge about program parts. During the past decade, significant developments have occurred in learning theory, concepts of knowledge, school organization, and technologies for education. The next challenge requires the organizing of these educational improvements around new and sometimes radical approaches to program development.

Considerable attention is now being devoted to long-range educational planning and the use of predictive techniques. Coping with rapid changes requires programs of teacher education which can be responsive to new developments and which can prepare persons to teach effectively in new environments. The models are the first major attempt to deal with these kinds of challenges. In so doing, they provide a framework for productive thinking about future improvements.

APPENDIX A

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APPENDIX B: LIST OF PUBLICATIONS

National Center for Educational Research and Development

Elementary Teacher Education Project

Copies of various project reports are now available from the Government Printing Office (The Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402) and from EDRS (ERIC Document Reproduction Service, 4936 Fairmont Avenue, Bethesda, Maryland 20014). These reports are available at the following prices:

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Volume I	FS 5.258:58024	5.00	027 285	31.35	2.50
Volume II	FS 5.258:58024	5.50	027 286	37.95	3.00
Volume III	FS 5.258:58024	5.00	027 287	29.65	2.25

A reprint of the teacher education program model developed by the University of Wisconsin may be ordered from the Government Printing Office by the number OE-58025.

The following related summaries and reports are also available:

- A self-initiated critique of the Syracuse University model program, Specifications for a Comprehensive Undergraduate and Inservice Teacher Education Program for Elementary Teachers. Available through EDRS: ED 027 276. Price $7.20 for hard copy; $.75 for microfiche.

- Some Comments on Nine Elementary Teacher Education Models, by Harry Silberman of the System Development Corporation. This paper is adapted from remarks made at an American Educational Research Association conference in November, 1968. Available through EDRS: ED 029 813. Price $.75 for hard copy; $.25 for microfiche.

- Elementary Teacher Training Models. A modified reprint of the University of Georgia Journal of Research and Development in Education, Spring, 1969 issue (Volume 2, Number 3). Available from the U.S. Office of Education (OE-58033).

Related articles published elsewhere include:

- The Story of Elementary Education Models, S.C.T. Clarke, Journal of Teacher Education, Volume XX, Number 3 (Fall, 1969), pages 283-293.

- Models for Improvements of Elementary Teacher Education, William E. Engbretson, Teacher Education: Action for Americans, 14th Biennial School for Executives/American Association of Colleges for Teacher Education, pages 19-29.

- Nine Plans for the Education of Elementary School Teachers, Nicholas Fattu, Teacher Education: Action for Americans, 14th Biennial School for Executives/American Association of Colleges for Teacher Education, pages 30-35.

- The New Models in Elementary Teacher Education, Jay A. Monson, Phi Delta Kappan, Volume LI, Number 2 (October 1969), page 101.

The present document is one of a set of three reports developed for the Office of Education by System Development Corporation.

The other two are:

- Analytic Summaries of Specifications for Model Teacher Education Programs (199 pp., TM-WD-(L)-319/000/00, July 1969).

. Systems Analysis and Learning Systems in the Development of Elementary Teacher Education Models (52 pp., TM-WD-(L)-319/002/01, October 1969).